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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/613,473	07/02/2003	Takeshi Naruo	4545	6755
21553	7590	08/11/2004	EXAMINER	
FASSE PATENT ATTORNEYS, P.A. P.O. BOX 726 HAMPDEN, ME 04444-0726			PASSANITI, SEBASTIANO	
			ART UNIT	PAPER NUMBER
			3711	

DATE MAILED: 08/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/613,473

Applicant(s)

NARUO ET AL.

Examiner

Sebastiano Passaniti

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on see detailed Office action.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 13-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 13-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

This Office action is responsive to communication received 07/02/2003 – application papers filed, first and second preliminary amendments; 02/20/2004 – priority papers.

Claims 1-3 and 13-29 are pending.

Following is an action on the MERITS:

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 13-15 and 16-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Kim. The only structure required by claims 1-3, 13-15 and 16-19 is the inclusion of a wood (type) golf club head having a face formed of a low friction material and more specifically a low friction face coated with carbon or SiC or diamond (like) material. The Kim reference shows a diamond coating applied to wood-type clubs (col. 4, lines 19-24). The remaining language in claims 1-3 and 13-15 is not structurally tied to the essentials of the golf club head. Applicant notes that the golf club head is “designed” so that launch angle and backspin speed may be defined by an ellipse. The fact that the Kim device includes the claimed structure of claims 1-3, 13-15 and 16-19 indicates that an ellipse as further claimed may also be designed.

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Claims 1-3, 13-15, 24, 25, 28 and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Cox. The only structure required by claims 1-3, 13-15, 24, 25, 28 and 29 is the inclusion of a wood (type) golf club head being a driver club head and more specifically a driver head having a loft of between 13 and 20 degrees. The Cox reference shows a wood-type golf club head, more specifically a driver, having a loft that may range from 7 or 8 degrees up to 13 degrees (col. 1, line 63 through col. 2, line 2). The remaining language in claims 1-3 and 13-15 is not structurally tied to the essentials of the golf club head. Applicant notes that the golf club head is "designed" so that launch angle and backspin speed may be defined by an ellipse. The fact that the Cox device includes the claimed structure of claims 1-3, 13-15, 24, 25, 28 and 29 indicates that an ellipse as further claimed may also be designed.

Claims 1-3, 13-15, 23, 26 and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by Viollaz. The only structure required by claims 1-3, 13-15, 23, 26 and 27 is the inclusion of a wood (type) golf club head wherein the face is formed of a carbon fiber material. The Viollaz reference shows a wood-type golf club head having a composite face structure that includes carbon fiber material arranged in layers with diverse angles between the fiber layers (col. 3, line 65 through col. 4, line 57). The remaining language in claims 1-3 and 13-15 is not structurally tied to the essentials of the golf club head. Applicant notes that the golf club head is "designed" so that launch angle and backspin speed may be defined by an ellipse. The fact that the Viollaz device includes the claimed structure of claims 1-3, 13-15, 23, 26 and 27 indicates that an ellipse as further claimed may also be designed.

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Claims 1, 13, 16 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Sasamoto. The only structure required by claims 1, 13, 16 and 21 is the inclusion of a wood (type) golf club head having a face formed of a low friction material and more specifically a low friction face coated with chromium or dispersed nickel. The Sasamoto reference shows a nickel coating applied to wood-type clubs (col. 14, line 31 through col. 15, line 51). The remaining language in claims 1 and 13 is not structurally tied to the essentials of the golf club head. Applicant notes that the golf club head is “designed” so that launch angle and backspin speed may be defined by an ellipse. The fact that the Sasamoto device includes the claimed structure of claims 1, 13, 16 and 21 indicates that an ellipse as further claimed may also be designed.

Claims 1, 13, 16 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Gojny. The only structure required by claims 1, 13, 16 and 22 is the inclusion of a wood (type) golf club head having a face formed of a low friction material and more specifically a low friction face having an insert formed of one of a number of polymers, as claimed. The Gojny reference shows an insert (14) manufactured from polyamide or polyimide (col. 2, lines 20-54). The remaining language in claims 1 and 13 is not structurally tied to the essentials of the golf club head. Applicant notes that the golf club head is “designed” so that launch angle and backspin speed may be defined by an ellipse. The fact that the Gojny device includes the claimed structure of claims 1, 13, 16 and 22 indicates that an ellipse as further claimed may also be designed.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 13, 16 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tilley. The only structure required by claims 1, 13, 16 and 20 is the inclusion of a wood (type) golf club head having a face formed of a low friction material and more specifically a low friction face including an ultra high strength polyethylene fiber reinforced plastic referenced as DYNEEMA FRP (DFRP). Admittedly, Tilley lacks a DFRP material for the face. However, the Tilley reference shows a face portion including high strength KEVLAR material, further noting that other high strength plastic materials may be substituted for the woven KEVLAR (col. 2, lines 1-22). The skilled artisan, familiar with the characteristics of commonly available materials and in this case the characteristics of high strength fiber reinforced plastics would have found it obvious to simply substitute another high strength fiber reinforced plastic for the KEVLAR material used by Tilley. The selection of a known material for use in a diverse environment to take advantage of the natural qualities of the material has been deemed to be obvious to the skilled artisan. See In re Hopkins 145 USPQ 140. The remaining language in claim 1 is not structurally tied to the essentials of the golf club head. Applicant notes that the golf club head is "designed" so that launch angle and backspin speed may be defined by an ellipse. The fact that the Tilley device includes the claimed structure of claims 1, 13, 16 and 20 indicates that an ellipse as further claimed may also be designed.

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The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 19 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The phrase "diamond-like" renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "like"), thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d).

The use of the trademark DYNEEMA FRP has been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Note col. 2, lines 13-35 in Shaw. Fisher shows a putter, iron and wood type golf club head having face inserts. Card shows a coating on the face portion, of interest. Shira describes the effect of grooves on the ball speed and the inclusion of low or high friction contact surfaces. Bouquet shows a driver style club with a loft that may vary up to 50 degrees. Werner, Solheim, Hardman, Galloway, Matsunaga and Iwata show imaginary or real elliptical patterns on the face portion of a club head.


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Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sebastiano Passaniti whose telephone number is 703-308-1006. The examiner can normally be reached on Mon-Fri (6:30-3:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Greg Vidovich can be reached on 703-308-1513. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Sebastiano Passaniti  
Primary Examiner  
Art Unit 3711

S.Passaniti/sp  
August 7, 2004